Driveshafts and Brakes

Complete Subframe Packages

1. a. Front subframe unit with suspension and running gear; rubber mounted 1976-96 complete as shown, ready to bolt on.............. HMP241001
   b. As above but with subframe for twin point front mounted radiator 1996 on ......................... HMP241003

2. a. Rear subframe unit with suspension and running gear to fit any year (no brake limiter valve for early cars) single line brake cable as fitted 1976 on ......................... HMP241002

3. a. The driveshaft with collar for pre-pot joint gearboxes when Hardy Spicer joints or rubber couplings are used. Sold in pair ........................................... C-BTA1267
   b. The same collared driveshafts but for pot joint gearboxes with inboard CV Joints (Pot Joints). Sold in pair ................. C-BTA1268

4. Upgraded steel driveshafts with circlip grooves but upgraded to stop ends twisting are available for both pot joint and remote type. (not shown).
   a. For remote type. Sold in pair ........................................... C-BTA1265
   b. For pot joint type. Sold in pair ................................. C-BTA1264

5. For grass track racing or other extremely destructive usage a pair of larger diameter driveshafts are available. Call for details.

6. Standard replacement driveshafts but upgraded to EN24WX to enable performance usage Available individually (Not shown).
   a. For pre pot joint Mini, Autos and ‘S’, R/H ............ ZTH4775
   b. For pre pot joint Mini, Autos and ‘S’, L/H ............ ZTH476LFT
   c. For pot joint Mini, R/H ................................ MS1246
   d. For pot joint Mini, L/H ................................ MS1247

7. Ultra reliable and a direct replacement for standard units these are made in aircraft spec material and are used by most current international Race and Rally teams. Due to stresses caused by machine cutting, all the splines are rolled. Eliminating spline lock and allowing free plunge in the inner joint results in better handling and less torque steer. The mechanical efficiency is greater than a pot joint, let alone a Hardy Spicer joint, thus reducing power losses and therefore maximising the potential of your engine. Special order only. Call for details.

Swivel Pin Kit

8. Top and bottom swivel pin kit for one side only. Spring fits lower pin. All other parts are the same top and bottom either side.
   a. Genuine ............................................. G5J166

Each set is enough to do one hub only.

CV Joint & Gaiter Kits

9. CV Joint for Cooper and all drum brake Minis. 1/8” nut ................................. GCV1013
10. Constant velocity joint, ‘S’ GT or any Mini 1984 on. 1/4” nut size. Sold individually ................................. GCV1013
   a. Universal kit. Fits any CV ......................... 1809027MS
   b. Genuine kit. For GCV1105 small joint. ............................................................................. G06233
   c. Genuine heavy duty kit with metal clips & grease. For GCV1013 large joint....................... G5V1053
12. Driveshaft small yoke end gaiter pre pot joint ......................................................... 1859029

Alloy Calipers

FOUR POT 6082T6
Alloy billet calipers

The advantage of alloy calipers is that they dissipate heat quicker, reducing fluid boiling. Now fitted with stainless steel pistons which albeit, have added 0.54g to the weight, they further improve performance by reducing heat transfer to brake fluid, also providing much longer life expectancy against corrosion, especially on road cars. The design of the caliper also helps expel pad dust and heat from the contact area. By using standard metro pad sizes which are larger and by virtue of 2 pistons both pushing against the pad, it controls the pad contact and brake efficiency.

13. a. Pair of 4 pot alloy calipers to fit 7.5” diameter brake discs where 10” wheels are used. The pads have to be modified by grinding/filing off a small corner section of the metal on two pads only which does not affect the quality on this fitment. The kit contains 1 pair of calipers, plus longer hub bolts and a set of retaining clips and pins for the pads. Brake pads are NOT included owing to customers different requirements. Black pair ........................................... C-AJJ4023

   b. Pair of 4 pot calipers for use with 8.4” diameter brake disc and 12”, 13” wheels. Kit contains 1 pair of calipers with retaining clips and pins. Brake pads are NOT included owing to customers different requirements. Black pair ........................................... C-AJJ4022

14. The fitting kit for either set of calipers when using vented brake discs from the Metro. The brake disc will obviously require machining down from 8.4” to 7.5” for use on 10” wheels for C-AJJ4023 calipers. Complete with 4 spacers (only black available) and correct retaining clip and pins ........................................... C-AJJ4021

WEIGHT COMPARISONS
4 piston alloy caliper .................................. 1.8kg
‘S’/1275GT caliper ........................................ 2.66kg
Late Mini caliper (post 85) ......................... 3.46kg
4 piston iron caliper ..................................... 3.48kg

Call to Order or Questions at 800-946-2642
**Caliper Pistons / Seals**

1. Caliper pistons in 303S stainless steel. Centerless ground for micro finish to stop sticking, not a mass produced cheap gimmick.

    a. For 997/998cc Cooper 7” disc ........................ 1H7193 .................. 8G8587
    b. Cooper ‘S’ 1275GT 7.5” disc .......................... 1H7862 .................. 8G8830
    c. Mini 1984 on 8.4” disc .............................. 1H7790 .................. M2601
    d. Metro and Mini Spares 4 pot caliper ............... SAA5022 ............ GRM5003

**Brake Shields & Shoes**

2. Right hand pair of disc shield covers.
   a. Pair of 7.5” covers ................................. MMKT0531
   b. Pair of 8.4” covers ................................. HMP44032

3. Left hand pair of disc shield covers.
   a. Pair of 7.5” covers ................................. MMKT0531
   b. Pair of 8.4” covers ................................. HMP44033

4. Shield to hub steady bracket.
   a. R/H .................................................. BTA1208
   b. L/H .................................................. BTA1209

5. Protector plates for protecting hose to calipers as used on works cars. Sold as a pair ................. C-AJJ3369

   a. 1 1/2” wide front brake shoes (4) .................. GBS102MS
   b. 1 1/4” wide rear brake shoes (4) .................... GBS101MS
   c. 1 1/4” wide rear brake shoes (4) genuine ........ GBS834AF

**Brake Pads - Unipart, Rover, Mintex, Carbon Metallic and EBC**

The Mintex C-TECH range is ideal for upgrading brakes when fade occurs. The center groove in the pad is to stop dust build up. Also available is carbon metallic compound with its broad operating temperature band encompasses everything from M171, DS11 and M115S. Exceptional co-efficient of friction, combined with a low wear rate make these a must for all racers.

- **Unipart/Rover Standard Material**
  - 7” Diameter Disc 998cc Cooper only: GBP102, C-AHT223
  - 7.5” Diameter Disc Cooper ‘S’, 1275GT: GBP103, C-STR987
  - 8.4” Diameter Disc Late Mini: (Lockheed) GBP281, C-STR987
  - Vented Disc Metro/Mini: (Mintex) GBP258, C-8G8994

- **Carbon Metallic Material**
  - 7” Diameter Disc 998cc Cooper only: N/A
  - 7.5” Diameter Disc Cooper ‘S’, 1275GT: C-8G8993
  - 8.4” Diameter Disc Late Mini: N/A
  - Vented Disc Metro/Mini: N/A

- **Black Stuff Kevlar Street Pads for Road/ Fast Road Use.**
  - 7” Diameter Disc 998cc Cooper only: GBP102-KEVLAR, GBP103-KEVLAR
  - 7.5” Diameter Disc Cooper ‘S’, 1275GT: GBP281KEVLAR
  - 8.4” Diameter Disc Late Mini: N/A
  - Vented Disc Metro/Mini: C-8G8994KEVLAR

- **Green Stuff Kevlar for Competition, Fast Road light race/rally. Known as roadsport.**
  - 7” Diameter Disc 998cc Cooper only: C-AHT223GREEN
  - 7.5” Diameter Disc Cooper ‘S’, 1275GT: C-AHT16KEVLAR
  - 8.4” Diameter Disc Late Mini: C-STR987
  - Vented Disc Metro/Mini: C-8G8994GREEN

**Master Cylinders**

- 1. Caliper seal repair kit per caliper
  - 2. Original Lockheed metal type canister for Cooper 7” disc .......................... GMC1008
  - 3. Brake master cylinder for Cooper S/1275GT larger fluid tank 3” high canister .... GMC171
  - 4. Master cylinder reservoir extension. Made in translucent white nylon, enabling easy fluid level checks. Also allows extra fluid to be carried .................................................. BHA4661
  - 5. Protector plates for protecting hose to calipers as used on works cars. Sold as a pair ................. C-AJJ3369
  - 6. Brake master cylinder larger capacity type for all Mini. .................................................. GMC1008

- 7. Original Lockheed metal type canister master cylinders. “Lockheed made in England” is embossed into the surface, as supplied by the factory. Pre 1976.
  - a. Clutch master cylinder for all Mini .......................................................... GMC1008
  - b. Brake master cylinder for standard Mini 2.25” high canister .......................... GMC171
  - c. Brake master cylinder for Cooper S/1275GT larger fluid tank 3” high canister .... GMC172
  - d. Master cylinder reservoir extension. Made in translucent white nylon, enabling easy fluid level checks. Also allows extra fluid to be carried .................................................. BHA4661

- 8. Brake master cylinder for Cooper 7” disc .................................................. GMC171
  - a. Master cylinder 1976-89 .......................................................... GMC227
  - b. Brake master cylinder 1976-89 .......................................................... BAU5654
  - c. Brake master cylinder 1976-89 .......................................................... BAU5655

- 10. Brake master cylinder for cars with factory built in servo. 1989 on .................................................. GMC90376

**Easy on-line ordering at www.minimania.com**
9

**Brake Discs and Kits**

### 7" Brake Discs
1. Cooper 7" diameter brake disc.
   - Sold individually.
   - BTA193
2. a. Brake pads for 7" discs.
   - GBP102
   - b. Kevlar brake pads for 7" discs.
   - C-AHT223

### 7.5" Brake Discs
3. a. Brake discs 7.5" diameter from upgraded material.
   - Sold individually.
   - GBD101
4. 7.5" Brake disc with grooves to wipe brake pad clean to improve contact area and efficiency.
   - Sold individually.
   - C-21A12165
5. Vented brake disc machined down to 7.5" for use with 4 pot calipers. Call for details.
6. a. Drive flange in upgraded EN24T to reduce wear and cope with extra stress.
   - 21A1270
   - b. Drive flange in standard material EN8.
   - 21A1270MS

### 7.5" Disc Conversion Kits
7. Complete Cooper "S" 7.5" diameter disc brake kit for converting from drum brakes to discs.
   - Brake Discs: GBD101
   - Calipers: GBP103-GREEN
8. Complete Cooper 7.5" diameter disc brake kit for converting from drum brakes to discs.
   - Complete Kit: C-AJJ4028
   - Complete Kit with non genuine calipers: C-AJJ4028MS
   - Complete Kit with brake disc shields: GBP103-GREEN
   - Upgraded Kit with 4 pot Alloy calipers & parts: GBP258
   - Disc, Flange, Caliper Kit from 12" to 10" wheels: GBP103-GREEN

### 8.4" Brake Disc
8. a. Budget non vented disc only as fitted to all Minis 1984 on.
   - Sold individually.
   - 21A2612
   - b. Standard non vented disc only as fitted to all Minis 1984 on. High quality.
   - Sold individually.
   - 21A2612MS
9. Drilled and slotted non vented performance use.
   - Sold in pair.
   - C-21A2612
10. a. A set of 8.4" Diameter vented brake discs and Kevlar pads.
11. Drilled and slotted vented type for performance use with 4 pot calipers. 8.4" disc. Sold in pair.
12. a. Drive flange, non vented discs upgraded EN24T.

### 8.4" Disc Conversion Kits
13. 8.4" diameter disc brake kit for converting to vented discs.
   - Brake Discs: GBD101
   - Calipers: GBP103-GREEN
   - Complete Kit: C-AJJ4029
   - Complete Kit with non genuine calipers: C-AJJ4029MS
   - Complete Kit with brake disc shields: GBP103-GREEN

---

**Call to Order or Questions at 800-946-2642**
### Brake Lines

1. Easy bend non rusting brake pipe kits, all pipes are sold separately if requested. Also available in L/H drive, change GB prefix to GL.
   - a. Single line, dry suspension, disc or drum brakes, no servo, 1959 on .................................................. GB4991
   - b. Single line, dry suspension, disc brakes with servo, Cooper ‘S’ & 1275GT etc. .......................... GB4992
   - c. Front to rear split, no servo, 1980-88 approximately ................................................................. GB4999
   - d. Front to rear split, no servo, 1980-88 ............................................................................................... GL5008
   - e. Single line, hydrostatic suspension, disc or drum, no servo. .......................................................... GB5001
   - f. Single line, hydrostatic suspension, disc brakes with servo, Cooper ‘S’ ........................................ GB5002
   - g. Diagonal split system van/estate 1978 on ................................................................. GB5007

2. Rubber brake hose sets.
   - Front & rear hoses are sold individually or buy a full car kit of 2 front & 2 rear hoses.
     - a. Drum brake Mini. (longer front hoses). ................................................................. GBH170
     - b. Disc brake Mini. ........................................................................................................... GBH174
   - Front Hose
   - Rear Hose
   - Full Car Kit
     - MMKT0516

3. Set of 4 brake hoses approx. .............................................................. GBH170

4. Pair of rear hoses with banjo fitting.
   - These replace the original hose and metal brake pipe fitted to the wheel cylinder. No modifications are required and are of special interest to owners of severely lowered cars where pipes can get crushed. The kit contains the banjo bolts to fit the wheel cylinder and tie wraps to hold hose to radius arm .................................................. C-AJJ4013

5. Braided clutch hose for pre-Verto clutches C-AJJ4025

6. a. Banjo type braided clutch hose for pre Verto clutches .................................................. C-AJJ4025B
   - b. L/H Type .................................................. C-AJJ4025LH

7. Braided one piece long clutch hose.
   - Replaces existing rubber hose and metal pipe. For pre-Verto or Pre-Verto.
     - a. R/H Type .................................................. C-AJJ4025OMP
     - b. L/H Type .................................................. C-AJJ4025LHMP

8. Set of braided hoses for Metro 4 pot calipers when converting for use on a Mini ................................ C-AJJ4024

### Rubber Brake Hoses

- 2. Rubber brake hose sets. Front & rear hoses are sold individually or buy a full car kit of 2 front & 2 rear hoses.
  - a. Drum brake Mini. (longer front hoses). ................................................................. GBH170
  - b. Disc brake Mini. ........................................................................................................... GBH174

### Steel Braided Brake Hoses

Steel braided brake and clutch hoses have a PTFE inner which helps to eliminate the spongy pedal feel under arduous conditions, and giving greater efficiency. The outer braided stainless steel cover minimises wear/damage and corrosion. All our braided hoses now have swaged ends to conform to Japanese, New Zealand and South African safety requirements.

3. a. Set of 4 brake hoses 2x front and 2x rear brake hoses .................................................. C-AJJ4026
   - b. Set of 5 hoses, kit as above but with clutch hose included for pre Verto. .......................... C-AJJ4027
   - c. Set of 5 hoses, kit as above but with clutch hose included for Verto only. ......................... C-AJJ4027B
   - d. Pair of front braided hoses only. ............................................................................................ C-AJJ4030
   - e. Pair of rear braided hoses only. .............................................................................................. C-AJJ4031

4. Pair of rear hoses with banjo fitting.
   - These replace the original hose and metal brake pipe fitted to the wheel cylinder. No modifications are required and are of special interest to owners of severely lowered cars where pipes can get crushed. The kit contains the banjo bolts to fit the wheel cylinder and tie wraps to hold hose to radius arm .................................................. C-AJJ4013

### Servos

9. This is the only remote servo available for the Mini in Lockheed. Available in a kit with full fitting instructions it is the same servo as fitted to the Cooper ‘S’ Mk3 and 1275GT, but can be fitted to any single line brake system from 1959 on.
   - a. Servo Kit with brackets ........................................... 13H7940
   - b. Servo only .................................................. 13H7949
   - c. Cooper ‘S’ fitting brackets only (not in kit) ......................... 21A2254
   - d. The original repair kit for SEN43 or 13H7939 servo ......................................................... LSS8107

10. This is not the original Cooper S Mk1 Lockheed type, but a close copy that has been reproduced for customers who require the authentic look without using the MK3 ‘S’ Lockheed Servo that was previously the only one available.
    - a. Servo that only bolts to GMC90376 master cylinder as fitted by Rover from 1989 on with split front to rear brakes, which had different pedal box linkage etc ........................................... GSM119
    - b. Servo only without locking bracket for UCS416 servo .................................................... 13H7949
    - c. Cooper ‘S’ fitting brackets only available separately, as a pair........................................ 21A2254
    - d. MK1/2/3 fitting brackets. Only fits 21A1293 or original Servo. ........................................... 21A1294

11. All ‘S’ Servos with collets and hydraulic fittings are supplied complete with rubber or PTFE brake lines.

12. Servo fitting kit is for all single line brake pipe cars when using 13H7939 servo.

13. The Servo fixing brackets are also available separately, as a pair
   - a. MK3 fixing brackets, as shown. Only fits 13H7939 MK3 Servo........................................... 21A2254
   - b. MK1/2 fixing brackets. Only fits 21A1293 or original Servo. ........................................... 21A1294

14. In-line valve required to stop gas coming back into the servo. This is not supplied in the Lockheed servo kit. If the servo has a built in valve this is also required in the hose line to ensure against contamination ........................................... 1TH2646

15. A pair of braided servo hoses and fittings are for cars from 1989 where the servo is fitted to the brake master cylinder as standard. Once fitted the servo can be moved to one side as required to gain access for work on the clutch, engine mounting or stabiliser bar without the necessity of having to remove the pipes and bleed the system.

### Pressure Regulator Valves

16. Pressure regulator valve for single line systems. Fitted on rear sub frame.
   - a. MK1/2 and Cooper ‘S’ Mk3 ........................................... 21A1774
   - b. All Mk3 except Cooper ‘S’ ........................................... 21A2031

17. Adjustable for competition ............................................ M572

18. Pressure regulator valve. Front to rear split systems. Fitted on bulk head ..................................... FAM7821

---

Note: See item 15 for braided hoses.
- Repair kit for GSM119, .......................... GSM120

---

Easy on-line ordering at www.minimania.com
Drum Brake Components

1. Rear brake backplate.
   Rear backplates are sold less adjuster screw and wedges. If the small wheel cylinder-locating hole is on the opposite side another hole should be drilled rather than removing the pin from the cylinder.
   a. For R/H .......................... 2IA05S
   b. For L/H .......................... 2IA06S
2. One adjuster & 2 wedge kit .................................. 17H7620
   a. One adjuster only ............... 17H7619
   b. Single wedge only ............... 17H7618
3. Gaiter for backplate and brake lever arm ........................... 17H7612
4. Car set of 4 rear brake shoes return springs .......................... BRAKE02
5. AP/Rover wheel cylinder, which includes a gasket and clip (items 6 & 7).
   a. Rear cylinder with .75” Internal bore size. Genuine Part .......... GWC102
   b. Rear cylinder with .625” Internal bore size. Genuine Part .......... GWC101
6. Rear wheel cylinder locating gasket .................................. 3TH4642
   Order as 1TH7949
7. Rear wheel cylinder clip ........................................ 3TH4642
8. Front brake backplate for cars with two wheel cylinders per backplate from 1968 on are made with the adjuster in place.
   a. For the R/H Backplate ......... 3TH2013
   b. For the L/H Backplate ......... 3TH2014
9. Car set (4) front brake shoe return springs .......................... GBK1733
10. AP/Rover wheel cylinders includes gaskets (item 11).
    a. For R/H Cylinder .9375” bore. Genuine Part ................. GWC126
    b. For L/H Cylinder .9375” bore ...... GWC127
11. Front wheel cylinder locating gasket ................................. 3TH3833
12. Wheel cylinder spring (4) to brake shoe must be fitted to ensure braking efficiency are available separately. .......................... 2TH3753

Brake Drums

13. Alloy brake drums - pair, with built in spacer and by virtue of its finned design dissipates heat quicker which in turn helps reduce brake fade.
    a. Superior quality ................. SUPERFINS
    b. Budget pair ........................ MINIFINS
14. Standard cast mini brake drum for front or rear. Sold individually .......................... 2IA22
15. Rear cast brake drum as fitted to Cooper ‘S’ 1275GT and all Mini’s from 1984 on. Characterised by the built in spacer. Sold individually .... 2IA279

Built Up Brake Backplate

16. Built up brake backplate kits for rear includes backplates with adjusters, cylinders and shoes as shown.
    a. For rear R/H ..................... 2IA05S8KIT
    b. For rear L/H ..................... 2IA060KIT

Handbrake

17. Fly off handbrake conversion so popular in the 60’s and commonly used on rally cars. The only parts supplied are the new pawl pictured and two rivets, with full fitting instructions ........................ C-AJJ4019
18. Original type handbrake plastic grip. Pre 1976 ....................... 1HH5541
19. Rubber handbrake grip. 1976 on ................................. FAM8356
20. Handbrake Black Vinyl gaiter. ........................................ CK989A
21. Light weight handbrake cable quadrants for dry suspension. Pre 1976, Sold as Pair ... C-AJ401B
22. Original handbrake cable quadrants for dry suspension. Pre 1976, Sold individually .................................. 2IA2454
23. Handbrake cable sector bracket 1976 on. .......................... FAM621
24. Fixing pin for quadrants ............................................. CLZ549
    a. Van, Estate and Pickups only. Sold individually ................. GVC1020
    b. Hydrolastic suspension cars only. Sold individually .... GVC1021
    a. Rear wheel to wheel cross cable .................................. GVC2134
    b. Front cable for saloons only, 25” long .......................... GVC2135
    c. Front cable van, estate, pickup, 29,25” long .................. FAM625

Valve Caps

27. Alloy Tire Valve Caps.
    Available in four anodised colors.
    Order Set of 4 as .......................... MTC3, MTC4, MTC5, MTC6

Locknuts

28. a. Set of 4 locking nuts for latest Mini/Cooper 8 Spoke Alloy. .................................. LOCKNUT1
    b. Set of 4 locking nuts for Mamba/Revo 10” wheels. ................ LOCKNUT2
    c. Set of 4 locking nuts for Minilite/Original Minilite Wheel Pre 1980 ................................. LOCKNUT3
    d. Set of 4 locking nuts for 13” RFX/Phoenix/Superlite large radius seat CN5 nut ............................ CN5
    e. Set of 4 locking nuts, Mini 12” steel - 1984 on, Wella CN2/5-type. ................................. LOCKNUT5
    f. Set of 4 locking nuts, Mini 10” steel - Pre 1984. GB alloys CNI/4-type ................................. LOCKNUT6

Call to Order or Questions at 800-946-2642